STEREO

Owner's Operating Manual

Professional Stereo Sound Mixer

with Graphic Equalizer

Please read before using this equipment

FEATURES

* It is a high quality professional sound mixer.
* 10 bands stereo graphic equalizer.
* High output power listen monitoring system.
* Channel 1 – channel 3 with "HIGH" "LOW" tone control.
* Each channel with "GAIN" control.
* Master output with "BALANCE" control.
* 1 MASTER. 2 AUX/VIDEO. 2 TAPE/CD. 2 PHONO and 3 MICropnone slide level controller.
* Channel 4 – channel 7 with remote switch and connection jack.
* Monitor system with level indicator.

Points for safe operation

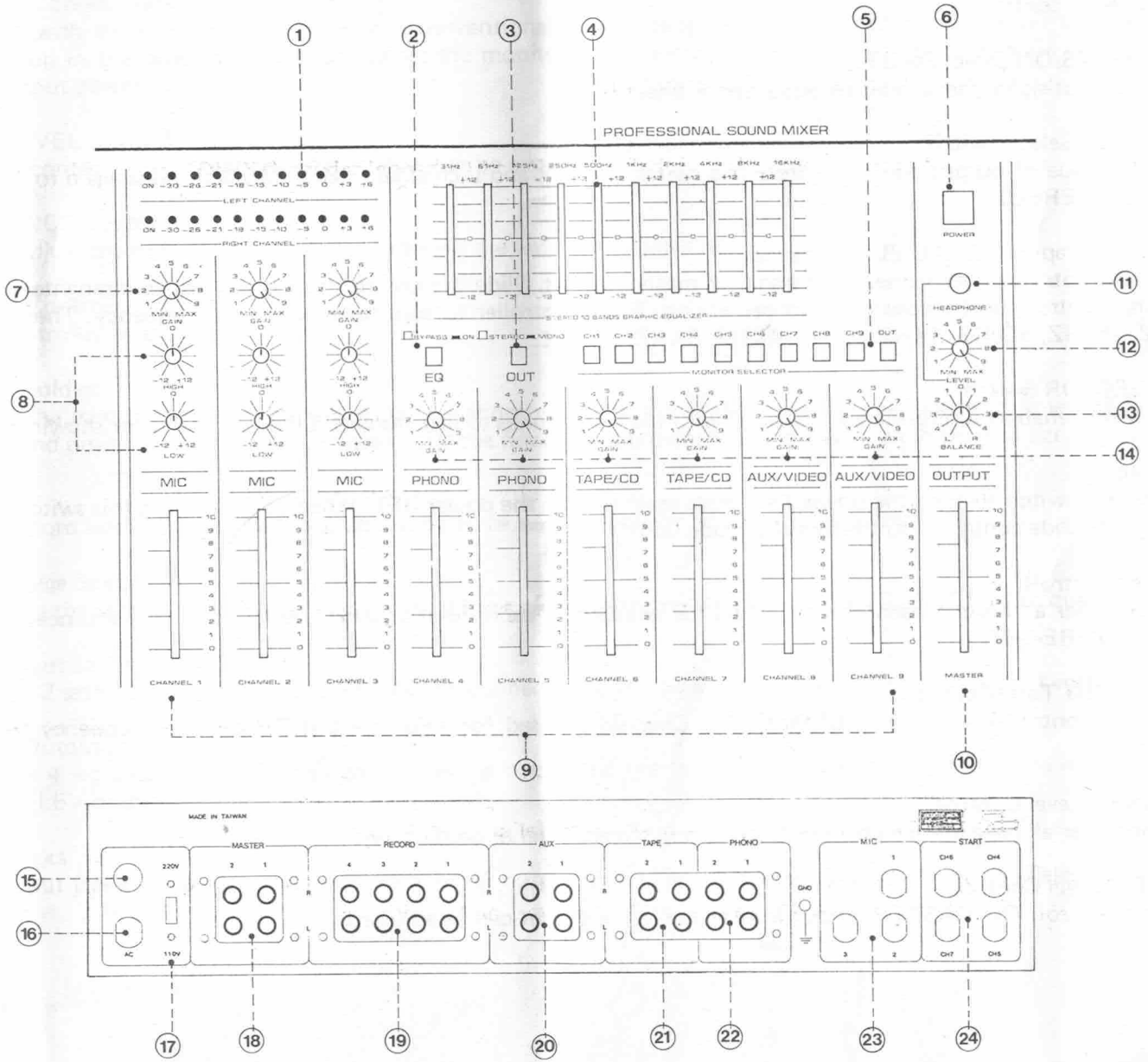
The mixer should not be used or stored in positions where it would be exposed to extreme amounts of heat from sources such as heaters or direct sunlight. If the mixer is exposed directly to the summer sun the panel surface might easily reach 70°C – 80°C. Such temperatures adversely affect the cabinet and internal electronic components. The ambient temerature sound be within the range of 0°C – 40°C.

As far as possible, avoid using the mixer in places where there is a lot of dust, particularly grit. An accumulation of fine frit in the slide volume may cause noise during fading.

As the operating panel is placed on top of the mixer, there is danger that small objects or liquids may get inside the mixer from this surface. Adequate care should be taken concerning this point.

Remove dirt from the panel and cabinet with a cloth that has been wrung almost dry after immersion in warm water containing a neutral cleaning agent. Wiping the unit with strong solvents such as thinner or benzene will dissolve the cabinet's Vinyl leather, the paint on the panel, leaving stains which are difficult to remove.

Nomenclature and method of using each controller



1. LEFT and RIGHT Channel Level Indicator:
   Indicated the LEFT and RIGHT level degree, whitch is selected by switch of monitor, adjust by the master level control or channel level control.

2. Equalizer BYPASS/ON Select Switch:
   Switch output signal through either equalizer or linearity.

3. STEREO/MONO Select Switch:
   Used for mode of output choice, depress this switch to set R and L channel mixing (MONO). press again to set R and L channel separate (STEREO).

4. 10 Band Stereo Graphic EQUALIZER Controls:
   With these cotrols to adjustment the signal of master output. Slide the control turned upward to strenghtening the output and slide the control turned downward to decreasing. Each controller to adjustment different frequency. There are 31HZ, 62HZ, 125HZ, 250HZ, 500HZ, 1KHZ, 2KHZ, 4KHZ, 8KHZ, 16KHZ.

5. Monitor SELECTOR Switch:
   These switch enable monitoring each channel with the headphones to listenning and the level indicator showing level degree.

6. POWER Switch:
   Depress this switch to turn the power ON, press again to turn the power OFF. When you operating this switch, be sure to set the "MASTER" slide controller to the minimum position.

7. Rotary GAIN Controls:
   This controller all have in each channel. Used for adjustment each input to same level or what level you need. This controller to be equal to PRE-SET.

8. Rotary HIGH.LOW Tone Controls:
   These two controller all have in Channel 1 – Channel 3. Used for adjustment HIGH or LOW frequency to strenghtening or decreasing.

9. Slide CHANNEL Level Control:
   This controller all have in each channel. Used to adjustment level of each channel.

10. Slide MASTER Level Control:
    With this control. The MASTER output level at the left and right can be adjusted.

11. HEADPHONE Connect Jack:
    To listen with stereo headphone. Plug in a conventional stereo headphone to the headphone jack on the right of front panel. Before plug in the headphone, be sure to set the monitor level control to minimum position. Because this jack have 1 Watt/8 Ohms output power.

12. Headphone LEVEL Control:
    With this control. The headphone output level can be adjusted.

13. Rotary BALANCE Control:
    Used to adjust the high and low sound in between the Left and Right level.

14. Rotary GAIN Control:
    These controller as same as NO. 7.

15. Power FUSE Holder:
    Protects the mixer from short circuits and other abnormal operating. If the power source indicator (at left of front penal) do not light up and power switch is "ON". Please check the fuse. If it is blown. Replace it with an indentical size and value (0.5A).

16. AC Cord:
    Plug this cord into ac outlet. Before plug this cord, be sure the voltage of ac outlet is correct.

17. AC Input Voltage Select Switch:
    For choice the operation voltage of this mixer. Before remove this switch, be sure the VOLTAGE of ac outlet is correct.

18. MASTER Output Jacks:
    There are 2 set output jacks (same signal), can be connected to any power amplifier and enough output voltage to drive.

19. RECORDing Output Jacks:
    There are 4 set output jacks (same signal). Used to connected the tape recorder or other unit for the recording or other. These jacks are 1.5V output.

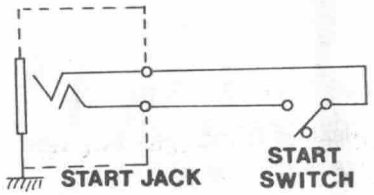
20. AUX Input Jacks:
    These input jacks can be connected with any linear output unit. (Tape Recorder, Tuner, CD Player, Television Audio Signal . . . . .).

21. TAPE Input Jacks:
    These input jacks can be connected with any linear output unit. (Tape Recorder, Tuner, CD Player, Television Audio Signal . . . . .). These two set input jacks with two remote switch.

22. PHONE Input jacks:
    There are 2 set input jacks, can be connected with turntable (RIAA) and these 2 set input jacks with two remote switch.

23. MICrophone Input Jacks:
    There are 3 input jacks. The microphone can be plug into these jack. (HIGH or LOW impedance all can be work)

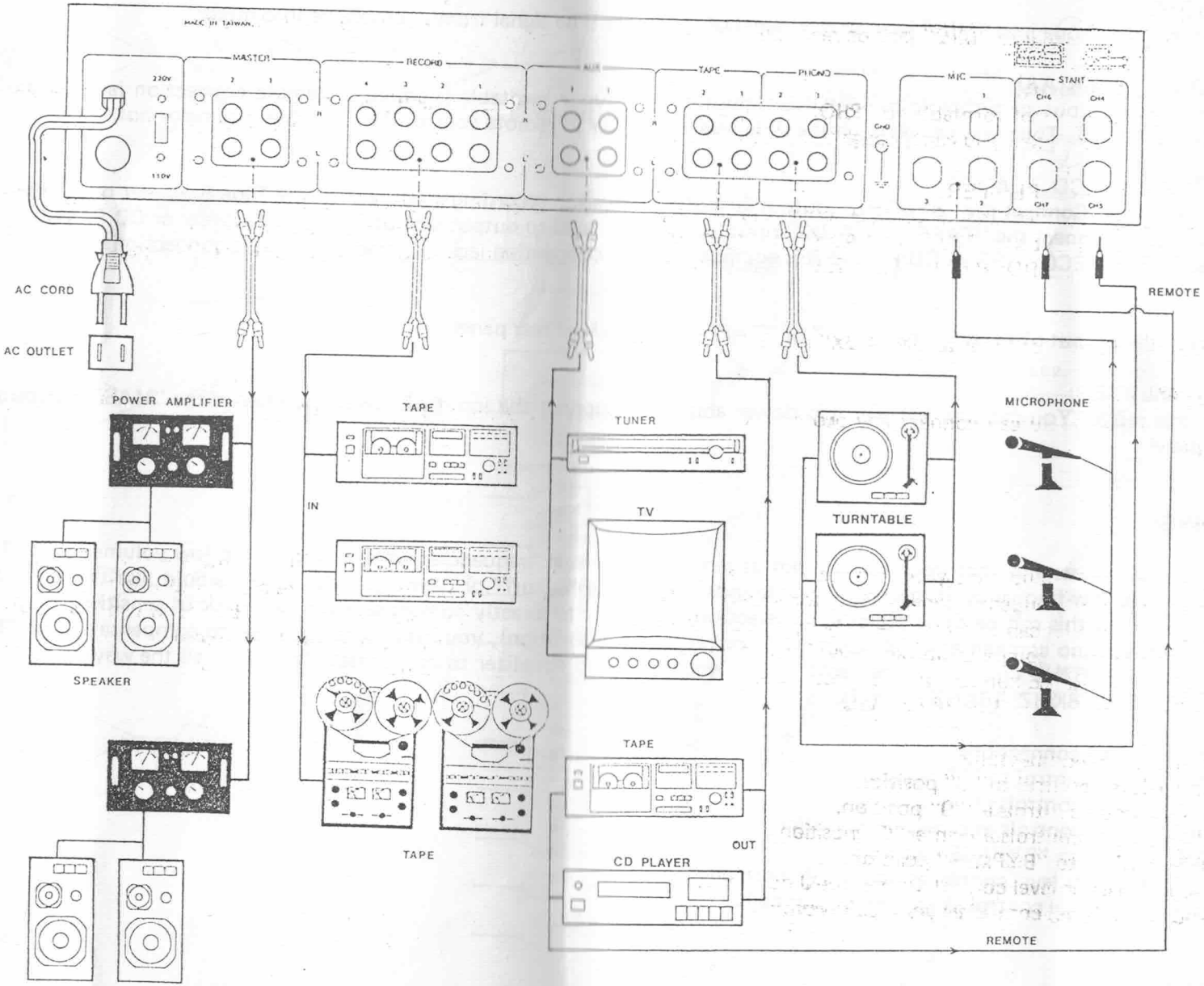
24. "START" Switch Connect Jacks:
    There 4 jacks connected with 4 switchs which is control by slide level controller (CHANNEL 4 – CHANNEL 7); When set the slide level controller to "0" position, the switch is "OPEN" (OFF) and set to over "1" position the switch will be "SHORT" (ON).



CONNECTIONS

Before making connections, be sure the power switch is "OFF" and ac cord is not connected.

NOTE: To reduce hum, should be use shielded audio cable for all connections.



MICROPHONE:

Plug the microphone into "MIC" jack on rear panel of the mixer. The signal from microphone into mixer.

TURNTABLE: (MM.RIAA)

Connect the output of turntable to "PHONE" input jacks. If your turntable is equipped remote connection jack, please connect it to "START" jack. Then you can through the slide level controller to remote control the turntable moving or not.

TAPE RECORDER. CD PLAYER:

For Recording: Connect the "RECORD" output jack of rear panel to recording input jack of the Tape Recorder or CD Player.
For Playing: Connect the "TAPE" or "AUX" input jack of rear panel to output jack of the Tape Recorder or CD Player.
If your TAPE RECORDER or CD PLAYER is equipped remote connection jack, as same as turntable connections.

TUNER:

Connect the output of tuner to the "AUX" or "TAPE" input jack of rear panel.

POWER AMPLIFIER:

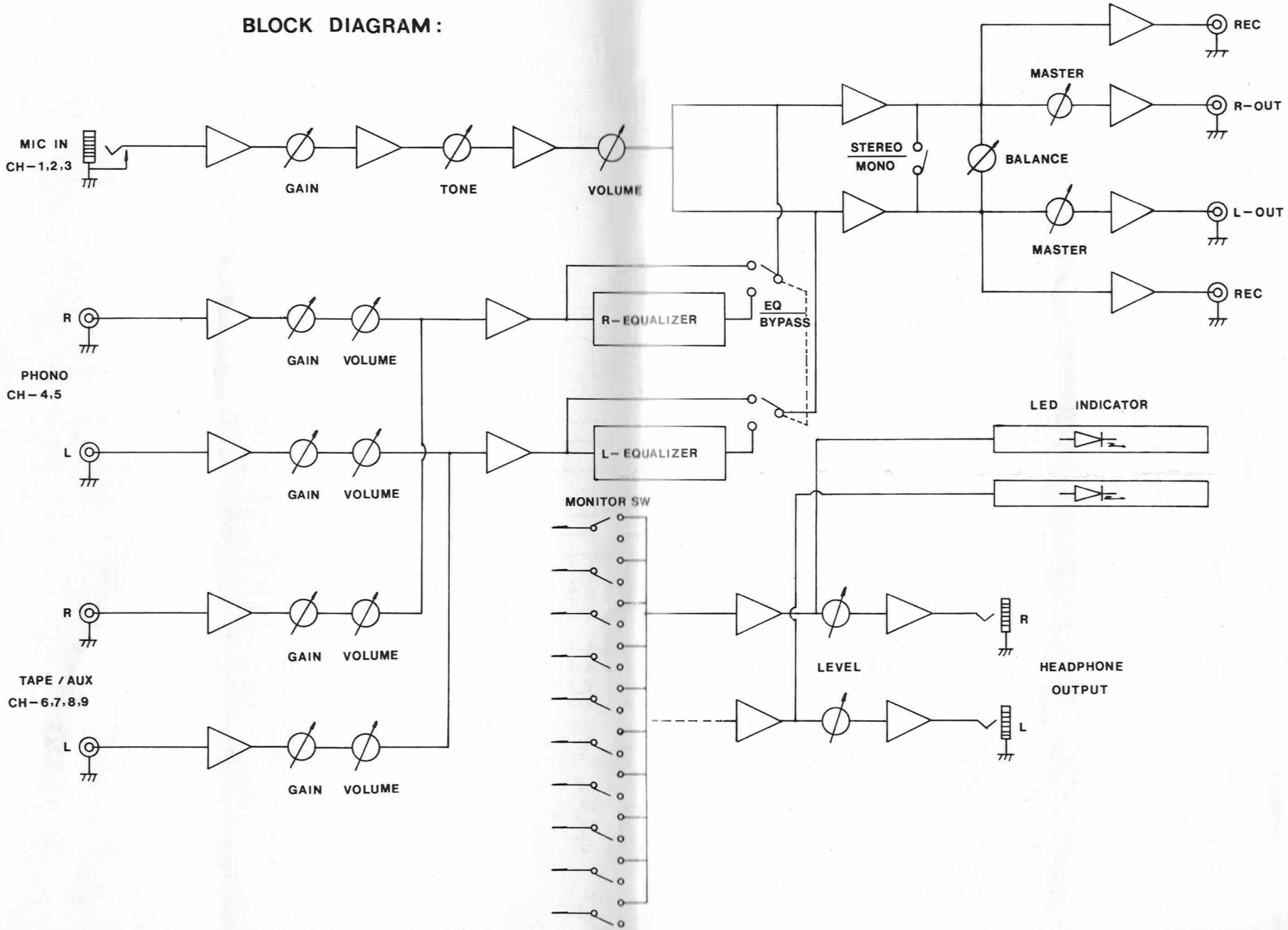
With this mixer. You can connect any two power amplifier, Connect the input of power amplifier to the "MASTER" output jack of rear panel.

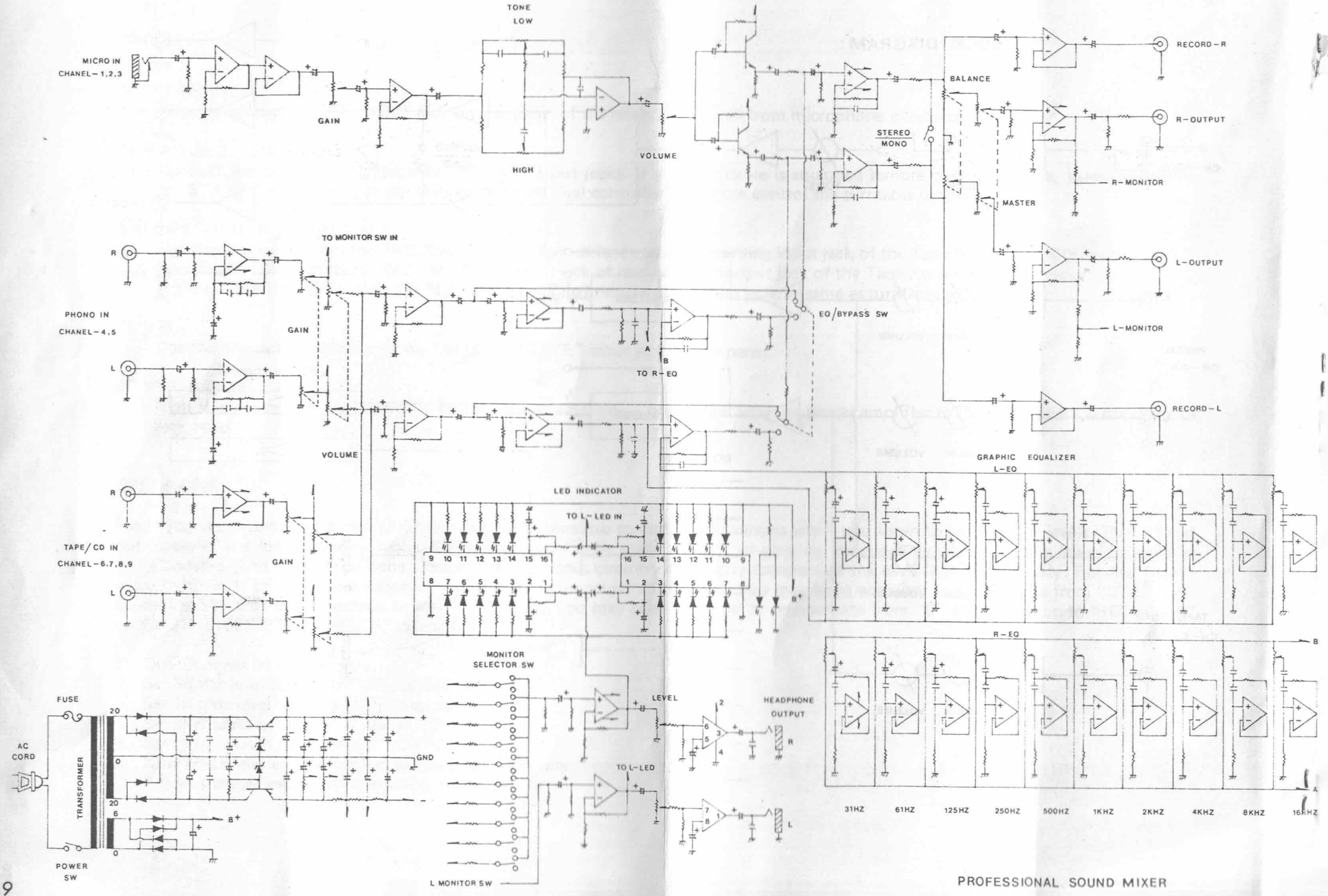
OPERATING:

First, you must understand that your ears are not as sensitive to certain frequencies when you listen to low volume levels. This is most noticeable in the low-frequency range. Thus, for sounds to be more "naturl" or pleasing, most people would like the lower frequencies to be boosted. And this can be done precisely by electronic circuitry to exactly compensate the ear's lack of sensitivity. For the "hard" room (with little or no compensation at lower levels or no sound absorbtion), you may want equalizer to compensate from "0" to "–6" db on the 31HZ or 62HZ control. In the "soft" room, you may need equalizer to compensate from "0" all the way up to "+6" or "+9" on the 31HZ. 62HZ. 8KHZ. 16KHZ controls.

1. Double-check all connections.
2. Set Master level control to "0" position.
3. Set all slide level controls at "0" position.
4. Set all Equalizer controls at center "0" position.
5. Set "EQ" switch to "BY.PASS" position.
6. Now adjust master level control as you would normally.
7. Adjust channel level control as you would normally.

BLOCK DIAGRAM :




MICRO IN
CHANEL – 1,2,3
GAIN
TONE
LOW
HIGH
VOLUME
STEREO
MONO
BALANCE
RECORD – R
R – OUTPUT
R – MONITOR
MASTER
L – OUTPUT
L – MONITOR
RECORD – L
TO MONITOR SW IN
PHONO IN
CHANEL – 4,5
GAIN
EQ/BYPASS SW
A
B
TO R – EQ
VOLUME
TAPE/CD IN
CHANEL – 6,7,8,9
GAIN
LED INDICATOR
TO L – LED IN
GRAPHIC EQUALIZER
L – EQ
R – EQ
31HZ
61HZ
125HZ
250HZ
500HZ
1KHZ
2KHZ
4KHZ
8KHZ
16KHZ
MONITOR
SELECTOR SW
LEVEL
HEADPHONE
OUTPUT
TO L – LED
L MONITOR SW
FUSE
AC
CORD
TRANSFORMER
GND
POWER
SW

SPECIFICATION

INPUT SENSITIVITY:	
MIC	3mV/ 20K OHMS
PHONO	3mV/ 50K OHMS (RIAA)
VIDEO	150mV/100K OHMS
TAPE	150mV/100K OHMS
AUX	150mV/100K OHMS
C.D	150mV/100K OHMS
OUTPUT LEVEL:	
MASTER	RATED: 2.2V/600 OHMS MAX : 8V/600 OHMS
RECORD	RATED: 1.5V/600 OHMS MAX : 8V/600 OHMS
HARMONIC DISTORTION:	0.02% (RATED OUTPUT)
FREQUENCY RESPONSE:	20HZ – 20KHZ ± 0.5db (RIAA ± 2 db)
S/N RATIO:	
MIC	70 db
PHONO	70 db
VIDEO	80 db
TAPE	80 db
AUX	80 db
C.D	80 db
TONE CONTROL:	
FREQUENCY	100HZ & 10KHZ
BOOST/CUT RANGE	± 12db
EQUALIZER:	
CENTER FREQUENCY	31HZ. 62HZ. 125HZ. 250HZ. 500HZ. 1KHZ. 2KHZ. 4KHZ. 8KHZ. 16KHZ.
BOOST/CUT RANGE	± 12db AT CENTER FREQUENCY
PHONES OUTPUT:	MAX 2.9V AT 8 OHMS LOAD
DIMENSION:	482mm(L) x 290mm(W) x 125mm(H)
4 SET (START)	REMOTE-CONTROL FOR TURNTABLE. MAX OPERATING DC 24V 500mA